DOCUMENT RESUME

ED 195 754 CE 027 379

AUTHOR	Stamas, George D.
TITLE	Long Hours and Premium Pay, May 1979.
INSTITUTION	Bureau of Labor Statistics (DOL), Washington, D.C.
REPORT NO	BLS-R-238
PUB DATE	80
NOTE	16p.: Tables will not reproduce well due to small print.
AVAILABLE FROM	U.S. Dept. of Labor, Bureau of Labor Statistics, Washington, DC 20212.
JOURNAL CIT	Monthly Labor Review: May 1980
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adults: Blacks: Blue Collar Occupations: Career Education: Employed Women: Employment Level: *Employment Practices: *Employment Statistics: Females: Males: *Overtime: Personnel Policy: *Premium Pay: Salaries: *Salary Wage Differentials: Statistical Data: Union Members: Wages: White Collar Occupations: Whites

ABSTRACT

From 1978-79 incidence of long hours among full-time wage and salary workers dropped for the first time since the 1974-75 recession. Of those who worked long hours, about 43% received premium pay (time and one-half the regular wage for hours worked in excess of forty per week). Employers used overtime hours to cope with disequilibrium phenomena and to meet increased demand. One-third of the workers regularly working long hours received premium pay, compared with two-thirds of those working long hours occasionally. Incidence of long hours remained about the same in goods-producing but fell in service-producing industries. Although white- and blue-collar employees were equally apt to work long hours, incidence of premium pay was much lower for white-collar workers. The proportion of union workers on long hours was two-thirds that for nonunion workers, while the proportion receiving premium pay was twice as large. Frequency of long hours among women was only half of that among men. Black workers were much less likely than white to put in long workweeks. Individuals aged 25-54 had the highest incidence of long hours. (The report also contains descriptions of basic labor force concepts, sample design, estimating methods, and reliability of data and supplementary tables.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Long Hours and Premium Pay
May 1979

CE

Special Labor
Force Report 238

U.S. Department of Labor
Bureau of Labor Statistics

ED195754

CE 027 379

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Unless identified as copyrighted, articles and tabulations in this publication are in the public domain and may be reproduced without permission of the Federal Government. Please credit the Bureau of Labor Statistics.

Following is a list of Special Labor Force Reports which have been published in the *Monthly Labor Review* since March 1975. Copies may be obtained, while the supply lasts, upon request to the Bureau of Labor Statistics or to any of its regional offices.

Number

190 Women Who Head Families: A socioeconomic Analysis, March 1975
191 Students, Graduates, and Dropouts in the Labor Market, October 1975
192 Work Experience of the Population, 1975
193 Educational Attainment of Workers, March 1976
194 Multiple Jobholders, May 1976
195 Weekly and Hourly Earnings Data from the Current Population Survey, May 1967-May 1976
196 Long Hours and Premium Pay, May 1976
197 New Labor Force Projections to 1990
198 The Labor Force Patterns of Divorced and Separated Women, March 1975
199 Employment and Unemployment in 1976
200 Students, Graduates, and Dropouts in the Labor Market, October 1976
201 Work Experience of the Population, 1976
202 The Extent of Job Search by Employed Workers, May 1976
203 Year-Round Full-Time Earnings in 1975
204 Going Back to School at 35 and Over, October 1976
205 Children of Working Mothers, March 1976
206 Marital and Family Characteristics of the Labor Force in March 1976
207 Absence from Work—Measuring the Hours Lost, May 1973-76
208 Labor Force Trends: A Synthesis and Analysis; and a Bibliography, October 1977
209 Educational Attainment of Workers, March 1977
210 Job Search of the Unemployed, May 1976
211 Multiple Jobholders in May 1977
212 Employment and Unemployment Trends During 1977
213 Women Who Head Families: A socioeconomic Analysis, March 1977
214 Long Hours and Premium Pay, May 1977
215 Students, Graduates, and Dropouts in the Labor Market, October 1977
216 Marital and Family Characteristics of Workers, March 1977
217 Children of Working Mothers, March 1977
218 Employment and Unemployment During 1978: An Analysis
219 Marital and Family Characteristics of Workers, 1970-78
220 Divorced and Separated Women in the Labor Force—An Update, October 1978
221 Multiple Jobholders in May 1978
222 Job Search of Recipients of Unemployment Insurance, February 1979
223 Students, Graduates, and Dropouts in the Labor Market, October 1978
224 Work Experience of the Population in 1977
225 Educational Attainment of Workers—Some Trends from 1973 to 1978
226 Long Hours and Premium Pay, May 1978
227 Back to School at 35 and Over, October 1978
228 Labor Force Patterns of Single Women, August 1979
229 Absent Workers and Lost Hours, May 1978
230 Median Earnings in 1977 Reported for Year-round Full-time Workers, June 1979
231 Occupational Mobility During 1977
232 Workers on Late Shift in a Changing Economy
233 Young Workers and Families: A Special Section
234 Employment and Unemployment During 1978: An Analysis
235 Job Tenure Declines as Work Force Changes
236 Work of Experience of the Population in 1978
237 Marital and Family Characteristics of the Labor Force, March 1979

Percent working long hours shows first post-recession decline

Special Labor Force Report shows that over 40 percent of full-time wage and salary workers who worked long weeks received premium pay

GEORGE D. STAMAS

From 1978 to 1979, the incidence of long hours among full-time wage and salary workers dropped for the first time since the 1974–75 recession. The 18.8 million employees who put in workweeks of 41 hours or more in May 1979 were about 26 percent of all full-time wage and salary workers, down about 1 percentage point from 1978. Of those who worked long hours, about 43 percent received premium pay, the same proportion as in 1978 and well above the recessionary low of 1975. (See table 1.)

These data were gathered through a supplement to the Current Population Survey and relate to wage and salary workers with one job who worked 41 hours or more during the week ending May 12, 1979.[1] They do not include the 3.3 million multiple jobholders who worked more than 40 hours, even if they passed the 40-hour mark on their principal job. Nor do they include the 4 million self-employed who worked 41 hours or more.

The Fair Labor Standards Act, passed by Congress in 1938, mandated that premium pay of time and one-half the regular wage be paid to qualifying nonsupervisory workers for hours worked in excess of 40 per week. Over the years, the act has been amended and in 1979 its overtime provisions covered an estimated 53 million workers, 74 percent of all nonsupervisory workers, 59 percent of all civilian wage and salary workers.[2]

While the act sets the standard for most workers, premium pay for overtime begins before 40 hours for some workers. Public laws covering government contracts and Federal employment generally entitle workers to premium pay for hours worked in excess of 8 per day without regard to weekly hours. In addition, some collective bargaining agreements specify overtime after 35 hours a week or even less, after 8 or fewer hours a day or on some other basis.[3] Thus, the data on long hours presented here include some workers who are not on "overtime" despite exceeding 40 hours per week, while they exclude others who worked overtime, although their workweek was less than 40 hours.

Use of overtime

Even with the premiums for overtime specified in laws and union contracts, employers still use overtime hours to get out their product. Management uses overtime to cope with "disequilibrium phenomena," such as strikes, mechanical breakdowns, or bad weather. Also, because the cost per hour of hiring, training, and providing fringe benefits to addditional employees can exceed the cost per hour of premium pay, management sometimes orders overtime to meet increased demand, particularly of a temporary or short-term nature. Some

Table 1. Full-time wage and salary workers who worked long weeks and those who received premium pay, May 1973–May 1979

[Numbers in thousands]

Year	All full-time workers	Worked 41 hours or more[1]		Received premium pay	
		Number	Percent of full-time workers	Number	Percent of those who worked 41 hours or more
1973	62,202	18,105	29.1	7,697	42.5
1974	63,714	17,564	27.6	7,302	41.6
1975	61,765	15,450	25.0	5,597	36.2
1976	64,546	16,679	25.8	6,621	39.7
1977	66,441	18,174	27.4	7,697	42.4
1978	69,428	18,977	27.3	8,138	42.9
1979	71,677	18,765	26.2	7,999	42.6

[1] Data are limited to wage and salary workers who worked at only one job.

George D. Stamas is an economist in the Office of Current Employment Analysis, Bureau of Labor Statistics.

Reprinted from May 1980
Monthly Labor Review
with supplementary tables

U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics

4

DEC 3 0 1980

Table 2. Full-time wage and salary workers who worked long weeks and those who received premium pay by hours worked, May 1979

[Numbers in thousands]

Usual hours and premium pay	Hours worked			
	Worked 41 hours or more	Worked 41 to 48 hours	Worked 49 to 59 hours	Worked 60 hours or more
Total worked 41 hours or more	18,765	8,687	6,249	3,829
Received premium pay	7,999	4,748	2,357	894
Percent receiving premium pay	42.6	54.7	37.7	23.3
Usually worked 41 hours or more	12,895	4,630	4,859	3,404
Received premium pay	4,152	1,979	1,485	687
Percent receiving premium pay	32.2	42.7	30.6	20.2
Did not usually work 41 hours or more	5,871	4,055	1,390	424
Received premium pay	3,847	2,768	872	206
Percent receiving premium pay	65.5	68.3	62.7	48.6

NOTE: Because of rounding, sums of individual items may not equal totals.

economists think that rising fringe benefits have created a "fringe barrier" to new hirings by diminishing the relative cost of an overtime hour. They claim that the time-and-a-half premium is no longer a very strong deterrent to the use of overtime.[4]

However, a trend toward the increased use of overtime is not obvious in the general data presented here. During May 1973–79, from 25 to 29 percent of full-time wage and salary workers put in more than 40 hours a week, and at least 36 percent of those on long hours (and often about 42 percent) received premium pay. One in 10 full-time wage and salary workers put in more than 40 hours a week and received premium pay.

Of the 18.8 million workers on extended schedules during the May 1979 reference week, 12.9 million were reported as regularly working 41 hours or more. Only one-third received premium pay, compared with two-thirds of those who worked over 40 hours only occasionally. (See table 2.) Whether or not a person routinely worked long hours, the proportion earning premium pay for extra hours decreased as the number of hours worked increased.

More than three-fifths of the workers who routinely worked long hours put in more than 48 hours and about half spread the work over more than 5 days. In contrast, only three-tenths of those who seldom worked long hours worked more than 48 hours during the reference week.

Approximately 7.4 million workers in goods-producing industries and 11.4 million workers in service-producing industries put in weeks of 41 hours or more in May 1979, nearly the same as the preceding year. Although about the same proportion of workers were on long hours in goods production as in services (27.2 and 25.5 percent) workers in goods production were—as was the case in previous years—twice as likely to receive premium pay for long hours. (See table 3.) Within the service-producing sector, however, the proportion of workers who received premium pay for long hours ranged up to 50 percent or more in transportation and public utilities and Federal public administration. The latter group includes the postal service, in which 78 percent of the employees on long hours received premiums.

Agriculture is the anomaly among the goods-producing industries, with 53 percent of the workers putting in more than 40 hours but only 12 percent receiving a premium. Farmworkers are exempt from overtime provisions of the Fair Labor Standards Act.

Table. 3 Full-time wage and salary workers who worked long weeks and those who received premium pay, by industrial group, May 1973–May 1979

[In percent]

Industrial group	Worked 41 hours or more							Received premium pay						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
All industries	29.1	27.6	25.0	25.8	27.4	27.3	26.2	42.5	41.6	36.2	39.7	42.4	42.9	42.6
Goods producing	30.0	27.7	23.4	26.6	28.6	28.0	27.2	63.9	60.5	53.7	60.4	62.0	61.1	61.5
Agriculture	54.6	54.7	55.9	56.8	53.1	47.4	52.6	7.9	10.4	11.8	13.4	10.9	14.0	12.2
Mining	38.4	41.7	36.6	34.1	34.5	40.9	34.8	65.8	64.8	57.5	57.4	64.5	65.6	65.0
Construction	23.0	21.8	20.9	21.4	23.9	22.3	21.2	56.6	53.1	52.2	52.6	55.9	55.1	54.9
Manufacturing	30.1	27.3	21.5	25.7	28.0	27.7	26.9	69.9	66.7	59.9	67.3	68.4	66.7	68.0
Durable goods	31.3	28.7	20.6	25.3	28.7	28.6	27.8	73.7	70.3	62.6	69.5	70.4	70.0	71.0
Nondurable goods	28.3	25.1	22.8	26.4	27.1	26.2	25.4	63.4	60.4	56.1	64.1	65.2	60.9	62.5
Service producing	28.5	27.4	26.0	25.4	26.6	26.9	25.5	27.3	28.9	26.9	26.6	29.6	31.3	30.3
Transportation and public utilities	27.1	26.2	23.3	24.1	26.2	26.7	26.7	53.6	53.2	48.4	44.1	51.1	49.8	49.9
Wholesale and retail trade	39.3	37.1	35.9	35.7	36.6	35.8	34.2	27.5	30.0	26.3	28.5	31.0	32.0	31.8
Finance, insurance, and real estate	21.7	20.4	21.6	20.5	22.2	21.8	20.8	16.2	21.2	19.8	18.4	19.3	21.3	20.5
Miscellaneous Services	26.2	25.9	24.0	22.7	23.7	24.3	22.6	18.8	19.9	18.8	19.0	22.0	24.0	21.6
Professional [1]	23.4	23.5	22.0	20.6	21.6	22.5	20.7	15.3	16.4	16.5	16.4	18.5	20.4	18.2
Other [2]	34.4	33.1	30.6	29.2	30.6	29.9	28.5	25.8	27.7	24.4	24.6	29.8	32.0	29.0
Public administration	17.1	17.0	15.5	15.5	16.6	16.7	15.6	36.9	34.8	35.9	37.5	36.2	43.4	40.9
Federal	15.0	13.5	11.4	13.4	14.8	15.2	14.4	58.1	57.3	53.1	58.8	53.0	58.7	52.4
Postal	20.4	12.9	9.0	16.7	18.1	21.3	18.2	68.2	59.1	(3)	76.4	78.3	80.8	78.4
Other Federal	12.1	13.8	12.4	11.9	13.4	12.6	12.9	49.1	56.6	46.6	48.0	38.4	43.3	37.4
State	15.8	14.7	14.3	11.4	11.1	12.1	9.4	24.0	18.5	11.2	17.9	18.9	31.0	42.5
Local	21.4	23.9	21.7	20.3	21.6	21.1	20.0	18.1	19.5	30.3	23.2	25.5	32.7	30.1

[1] Includes health, education, and welfare services.

[2] Includes forestry and fisheries, business and repair services, entertainment, personal services, and private household workers.

[3] Percent not shown where base is less than 75,000.

Long hours in services down

The incidence of long hours in the goods-producing industries was about the same as in the previous year, but lower than in May 1977. However, it remained well above the recessionary low of 1975. The proportion of long hours used by employers in the service sector has fallen to a level as low as anytime in the 7-year period. This may be due partly to the gradual removal of the Fair Labor Standards Act's overtime exemptions for hotel, motel, and restaurant employees, which was completed in January 1979. This does not necessarily indicate weakness of the economy. On the contrary, employers—expecting strong demand for their goods or services—may have been more likely than in recent years to hire additional employees, rather than work those on board overtime.

State and local public administration bucked the trend of relatively little change in premium pay set by other industries. In State and local government, the proportion of workers on long hours receiving premium pay has shown a substantial increase during 1973–79. At the same time, the incidence of workers on long hours in State public administration has been decreasing.

Although white-collar and blue-collar employees are about equally apt to work long hours, the incidence of premium pay is much lower for white- than blue-collar workers. (See table 4.) Managers and administrators were among the most likely of all workers to put in long hours and the least likely to receive premium pay. Clerical workers were among the least likely to work long hours, but the proportion who received premium pay was comparable to that among blue-collar workers. Transport equipment operatives were about as likely as managers and administrators to work long hours and were the least probable of all blue-collar employees to receive premium pay. A higher proportion of other operatives received premium pay than any other occupation.

Table 4. Full-time wage and salary workers who worked 41 hours or more a week and those who received premium pay, by occupational group, May 1979

(Numbers in thousands)

Occupational group	May 1979		
	Number	Percent of full-time workers	Percent received premium pay
All occupations	18,765	26.2	42.6
White collar	9,691	26.2	23.8
Professional and technical workers	3,199	26.4	21.0
Managers and administrators	3,643	44.0	11.9
Sales workers	1,212	34.2	14.7
Clerical workers	1,638	12.6	62.5
Blue collar	7,325	27.2	70.9
Skilled trades	3,286	30.1	67.0
Operatives, except transport	2,140	22.2	84.7
Transport equipment operatives	1,195	40.4	56.2
Laborers, except farm	704	20.7	71.6
Service workers	1,279	18.3	36.8
Farm workers	470	56.6	6.8
Production and nonsupervisory [1]	11,393	22.7	60.1

[1] All occupations except professional and technical, managerial and administrative, private household, and farmworkers.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 5. Full-time wage and salary workers who worked long weeks and percent who received premium pay, by union status and occupation and industry group, May 1979

Occupational and industrial group	Percent working 41 hours or more		Percent working 41 hours or more who received premium pay	
	Union [1]	Other	Union [1]	Other
Occupation	20.0	28.9	69.1	34.6
White collar	16.7	28.7	37.7	21.7
Blue collar	22.8	31.0	85.5	61.9
Service	15.5	19.4	53.4	31.8
Farm	[2]	58.6	[2]	6.1
Industry	20.0	28.9	69.1	34.6
Goods producing	20.9	31.0	90.2	50.0
Agriculture	[2]	54.5	[2]	11.8
Mining	20.4	43.0	[2]	57.4
Construction	13.4	25.7	80.7	47.0
Manufacturing	22.6	29.7	91.4	56.4
Service producing	19.2	27.8	49.3	25.6
Transportation, public utilities	25.5	32.5	70.7	30.6
Trade	22.3	36.0	76.7	27.7
Miscellaneous services	16.6	24.0	16.2	22.4
Public administration	14.4	16.5	58.4	28.8

[1] Member of a labor union or of an employee association similar to a union or working at a job covered by a union or employee association contract.

[2] Percent not shown where base is less than 75,000.

The proportion of white-collar workers on long hours was lower in 1979 than in 1978, and had returned to a level as low as in any May in the preceding 6 years. Although the work schedules of blue-collar workers tend to be more cyclically sensitive (probably because the industries where they concentrate are particularly sensitive to business cycles) the number and percent of blue-collar workers on long weeks were about the same in May 1979 as 1 year earlier. About the same proportion of blue-collar workers received premium pay for long hours in 1979 as in 1973, while the proportion of white-collar workers had risen slightly.

The proportion of service workers on long hours dropped over the 1973–79 period, while the proportion receiving premium pay, though off from the May 1978 level, rose considerably over the May 1973 rate, from 25.7 to 36.8 percent.

Negotiations by unions

Workers covered by union contracts make up three-tenths of the full-time wage and salary workers.[3] In some cases, unions have negotiated shorter standard hours and higher overtime premiums than provided by law, as well as the right to a fair share of overtime and the right of individual workers to refuse overtime. Table

Table 6. Full-time wage and salary workers who worked long weeks and those who received premium pay, by selected characteristics, May 1979

[Numbers in thousands]

Characteristic		Worked 41 hours or more		Received premium pay	
		Number	Percent of full-time workers	Number	Percent of those who worked 41 hours or more
Men		14,778	32.7	6,191	41.9
Age	16 to 19 years	420	24.5	244	58.1
	20 to 24 years	1,994	31.6	1,127	56.5
	25 to 54 years	10,666	34.4	4,254	39.9
	55 years and over	1,696	27.6	565	33.3
Race	White	13,761	34.2	5,642	41.0
	Black and other	1,017	20.7	549	54.0
Marital status	Never married	2,283	25.8	1,063	46.6
	Married, spouse present	11,300	34.5	4,585	40.6
	Other	1,195	33.2	543	45.4
Union status	Union[1]	3,674	23.5	2,674	72.8
	Other	11,105	37.6	3,518	31.7
Women		3,986	15.0	1,807	45.3
Age	16 to 19 years	134	11.0	78	58.2
	20 to 24 years	701	15.1	406	58.2
	25 to 54 years	2,708	15.6	1,163	42.9
	55 years and over	443	13.6	159	35.9
Race	White	3,616	15.9	1,621	44.8
	Black and other	371	9.6	186	50.1
Marital status	Never married	944	15.1	408	43.2
	Married, spouse present	2,059	14.2	947	46.0
	Other	985	17.1	453	46.0
Union status	Union[1]	711	11.3	354	49.8
	Other	3,276	16.2	1,453	44.4

[1] Data include workers who either are members of a labor union or of an employee association similar to a union, or whose job is covered by a union or employee association contract.

NOTE: Because of rounding, sums of individual items may not equal totals.

5 shows that the proportion of union workers on long hours was only two-thirds that for nonunion workers, while the proportion that received premium pay for long hours was twice as large. This relation pervades the major occupational and industrial groups, though the relative differences between the union and nonunion rates vary.

The frequency of long hours among women is only half of that among men. (See table 6.) For those women who did work long hours, their workweeks were short relative to those of men; 58 percent of the men worked more than 48 hours compared to 39 percent of the women. A larger proportion of men than women regularly work long hours, as well. Women, however, were slightly more likely to receive premium pay than men. Married men worked long hours more frequently than men who were never married but with little difference from widowed, separated, or divorced men. Among women, long hours varied less with marital status.

Black workers were much less likely than white workers to put in long workweeks. Among the full-time wage and salary workers, 28 percent of whites and 16 percent of blacks worked long hours in May 1979.[6] However, 53 percent of the black workers earned premium pay for their long hours, compared to 42 percent of the white workers. Disproportionately small numbers of blacks work in professional, technical, or management occupations, where long hours are more common and premium pay less so. The differences in the incidence of premium pay between black and white workers was greater among men than women.

Individuals 25 to 54 years old had the highest incidence of long hours. However, the likelihood of receiving premium pay declines in successively older age categories, dropping from 58 percent for teenagers to 34 percent for persons 55 years and over. A factor in this is that many older workers have taken supervisory positions where premium pay provisions do not apply. Even when the worker may have the choice of accepting premium pay, the combination of higher income and progressive income tax schedules may make older workers more likely to take compensatory time off for long hours rather than premium pay. □

FOOTNOTES

[1] The Current Population Survey is a survey of households, numbering 56,000 in May 1979, which is conducted for the Bureau of Labor Statistics by the Bureau of the Census. A worker reported as receiving premium pay is one who answered "yes" to the question: Did . . . get a higher rate of pay, like time and a half or double time, for hours . . . worked over 40? Data on premium pay are not available for the 3.3 million wage and salary workers who held two or more jobs totaling 41 hours or more. For information on these workers, see Edward S. Sekscenski, "Women's share of moonlighting nearly doubles during 1969–79," *Monthly Labor Review*, this issue.

Although the data presented here provide considerable information on the number and characteristics of workers on extended schedules and on their receipt of premium pay, they cannot measure with precision the number of overtime hours. For data from employer payroll records on overtime hours paid production workers in manufacturing, see *Employment and Earnings* (Bureau of Labor Statistics) monthly, table C-2.

[2] *Minimum Wage and Maximum Hours Standards Under the Fair Labor Standards Act* (U.S. Department of Labor, Employment Standards Administration, 1978) p. 62.

[3] Workers in firms holding government contracts are covered by the Walsh-Healey Public Contracts Act (Public Law 74-846, June 30, 1936) or the Contract Work Hours and Safety Standards Act (Public Law 87-581, Aug. 13, 1962). The Federal Pay Act (U.S. Code, title 5, Ch. 61) applies to Federal workers. For more information on overtime provisions in union contracts see *Characteristics of Major Collective Bargaining Agreements, July 1, 1976*, Bulletin 1957 (Bureau of Labor Statistics, 1979), pp. 43-58.

[4] For various views on this point, Ronald G. Ehrenberg, *The Short-Run Employment Decision and Overtime Behavior*, Ph.D. dissertation, Northwestern University, 1970, or Joseph Garbarino, "Fringe Benefits and Overtime as Barriers to Expanding Employment," *Industrial and Labor Relations Review*, April 1964, pp. 426-442, or Robert M. MacDonald, "The Fringe Barrier Hypothesis and Overtime Behavior," *Industrial and Labor Relations Review*, July 1966, pp. 562-569, and, most recently, Arthur R. Schwartz, *The Effects of Benefits and Overtime Costs on the Short Run Cyclical Demand for Labor in the Automobile Industry in Michigan*, Ph.D. dissertation, the University of Michigan-Wayne State University, Ann Arbor, Michigan, January 1979.

[5] In this report, a union worker is defined as a member of a labor union or employee association similar to a union or a worker whose job is covered by a union or employee association contract.

[6] "Black workers" refers to all workers who are not white. According to the 1970 Census of Population, black people make up about 89 percent of the "black and other" population.

Appendix

This report contains, in addition to the article from the May 1980 issue of the Monthly Labor Review, the following material:

Explanatory note A-2

Supplementary tables:

A. Number and percent of full-time wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by industry group, May 1978 and May 1979 . . . . . A-6
B. Percent of full-time wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by occupation group, May 1973–1979. . . . . A-6
C. Number of wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by industry group and hours worked, May 1979 . . . . . A-7
D. Number of wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by occupation group and hours worked May 1979 . . . . . A-7
E. Number of wage and salary workers who worked 41 hours a week or more and number and percent who received premium pay, by hours worked, May 1973–79. . . . . A-8

Explanatory Note

Estimates in this report are based on supplementary questions in the May 1979 monthly survey of the labor force conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. The basic labor force concepts, sample design, estimating methods, and reliability of the data are described briefly in the material which follows.[1]

Definitions and concepts.

Population coverage. Each month trained interviewers collect information from a sample of about 56,000 households in 614 areas in 1,113 counties and independent cities with coverage in each of the 50 States and the District of Columbia. Estimates in this report are for persons 16 years of age and over in the civilian noninstitutional population during the calendar week ending May 12, 1979.[2] The civilian noninstitutional population excludes all members of the Armed Forces and inmates of institutions, such as homes for the aged and correctional institutions.

Wage and salary workers. The category of worker used in this report is comprised of persons working for wages, salary, commission, tips, payment in kind, or at piece rates. Data include such employees in the private and public sectors.

Industry and occupation. The categories used are the same as those in the 1970 Census of Population.

Hours of work. Data on hours of work are for the actual number of hours worked during the survey week, rather than hours scheduled or hours paid. Data are from answers to the question: "How many hours did. . .work last week at all jobs?" In this study, data on hours apply to all wage and salary workers with one job who worked 41 hours or more.

Full-time workers. Full-time workers are those persons who were reported as usually working 35 hours or more each week.

Premium pay. Data on premium pay are based on answers to the question: "Did. . .get a higher rate of pay, like time and a half or double time, for hours. . .worked over 40?"

Age. The age classification represents age at most recent birthday.

Race. The population is divided into two groups on the basis of race: white, and black and other. The latter category includes Indians, Japanese, and Chinese.

Marital status. Persons are classified into the following categories according to their marital status at the time of interview: Married, spouse present; and other marital status. The classification "Married, spouse present" applies to husband and wife if both are reported as members of the same household even though one may be temporarily absent on business, vacation, on a visit, in a hospital, and so forth at the time of interview. The term "other marital status" applies to persons who are single, married with spouse absent, widowed, or divorced.

Union status. A worker who is a member of a labor union or an employee association similar to a union, or who is not a member but whose job is covered by a union or employee association contract, is classified as union.

Sums of distribution. Sums of individual items, whether absolute numbers or percentages, may not equal totals because of rounding of totals and components.

Reliability of the estimates.

Estimating procedure. The estimating procedure used in this survey inflates weighted sample results to independent estimates of the civilian noninstitutional population by age, sex, and race. These independent estimates are based on statistics from the 1970 Census of Population and other data on births, deaths, immigration, emigration, and strength of the Armed Forces.

[1] For a more complete description of the methodology, see Concepts and Methods Used in Manpower Statistics derived from the Current Population Survey, Report 463 (Bureau of Labor Statistics).

[2] In prior years data were derived from a sample of about 47,000 households in 461 areas in 923 counties and independent cities.

Variability. Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules and procedures. As in any survey, the results are also subject to errors of response and reporting. These may be relatively large in the case of persons with irregular attachment to the labor force.

The standard error is primarily a measure of sampling variability, that is, of the variations that might occur by chance because a sample rather than the entire population is surveyed. As calculated for this report, the standard error also partially measures the effects of response and enumeration errors but does not measure any systematic biases in the data. The reader can approximate standard errors for the estimates by using the tables or formulas provided as in the following examples.

Table 1 shows the standard error for estimates of specific sizes of groups. When using this table, standard errors of estimates for levels not shown must be interpolated. An estimated 18,765,000 wage and salary workers worked 41 hours or more in May 1979. Linear interpolation of the values found in table 1 shows the standard error of that number to be approximately 190,000. That is, chances are about 2 out of 3 that a complete census would have differed from the sample estimate by less than 190,000.Chances are 19 out of 20 that the difference would have been less than 380,000.

Table 1. Standard errors of estimated numbers by various demographic characteristics

(68 chances out of 100)

Characteristic	Estimated level (in thousands)							
	100	250	500	1,000	2,000	4,000	6,000	8,000
Both sexes								
Total or white	15	24	34	47	67	94	114	130
Five year age span or teenage	15	24	33	46	63	82	91	94
Twenty-five years or older	15	24	34	47	67	93	113	129
Black and other	15	24	33	46	63	82	91	93
Male, only								
Total	15	24	34	47	66	92	111	125
Five year age span or teenager	15	23	33	44	58	65	52	
Twenty-five years or older	15	24	33	47	66	91	109	122
White	15	24	34	47	66	92	110	124
Black and other	15	23	32	44	57	62	43	
Female, only								
Total or white	13	21	30	42	59	83	100	115
Five year age span, teenage or twenty-five years or older	13	21	29	40	55	70	75	
Black and other	13	21	29	41	55	71		
	10,000	15,000	20,000	30,000	40,000	50,000	60,000	70,000
Both sexes								
Total or white	145	173	196	228	250	263	269	268
Five year age span or teenage	90							
Twenty-five years or older	143	170	189	218	232	237	232	
Black and other	89							
Male, only								
Total	138	160	174	185	175	140		
Five year age span or teenager								
Twenty-five years or older	133	152	160	155	111			
White	136	156	169	173	152			
Black and other								
Female, only								
Total or white	127	151	170	196	211			
Five year age span, teenage or twenty-five years or older								
Black and other								

The use of the formula, used to compute the values in the table, eliminates the need to interpolate for intermediate values not found in the table. The values found in table 1 were computed from this formula:

$$\text{standard error of an estimated group size} = ax^2 + bx$$

where "a" and "b" are parameters found in table 2 associated with the deomgraphic characteristics of the group and x is the estimated size of that group. For the case above, with an estimated 18,765,000 wage and salary workers putting in 41 hours or more, substituting the values of the "a" and "b" parameters (–0.0000177 and 2267, respectively) and the estimated number (18,765,000) yields 191,000 as an approximate value for the standard error.

Table 3 shows the standard error of estimates of specific percents. As with table 1, the approximate values of standard errors of estimated percents not shown must be interpolated. The workers on long workweeks were 26.2 percent of the 71,677,000 full-time wage and salary workers in May 1978. Table 3 shows the standard error of 26.2 percent with a base of 71,677,000 to be about 0.25 percent. That is, chances are about 2 out of 3 that a complete census would have disclosed the proportion to be between 26.0 and 26.5 percent, and 19 out of 20 that the proportion would have been between 25.7 and 26.7 percent. Estimates of standard errors pertaining to a group composed of men or both sexes can be found on or interpolated directly from table 3. Standard errors pertaining to a group of women are estimated similarly, but the tabulated or interpolated value is multiplied by a factor of 0.89 to adjust for differences between distribution of economic variables over the female and the total population.

The values in table 3 are generated from the formula:

$$\text{standard error of estimated percent} = \sqrt{\frac{b}{y}\, p\,(100-p)}$$

where "p" is the estimated percent, "b" is a parameter associated with the demographic characteristics of the group in the numerator of the percent (see table 2) and "y" is the estimated level of the base of the percent. As an alternative to table 3 this formula can be used to approximate the standard error of a percent. In the case above, with 26.2 as "p", 2,267 as the "b" for all workers on long workweeks, and 71,677,000 as "y" the base of the percent, solving the formula gives an approximate standard error of 0.25 percent for that estimate.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the corresponding absolute estimates of the numerators of the percentages, particularly if the percentages are large (50 percent or greater).

The Bureau of the Census provided the procedure and parameters for estimating standard errors. The procedure does not produce exact values of the standard errors but does give an indication of their order of magnitude.

Table 2. "a" and "b" parameters for calculating standard errors of estimated numbers and percentages pertaining to groups with certain demographic characteristics

Characteristic	"a"	"b"
Both sexes		
Total or white	–0.0000177	2,267
Five year age span or teenage	–0.0001454	2,267
Twenty-five years or older	–0.0000229	2,267
Black and other	–0.0001474	2,267
Male, only		
Total	–0.0000375	2,267
Five year age span or teenage	–0.0003014	2,267
Twenty-five years or older	–0.0000490	2,267
White	–0.0000423	2,267
Black and other	–0.0003271	2,267
Female, only		
Total or white	–0.0000166	1,776
Five year age span, teenage or twenty-five years or older	–0.0001390	1,776
Black and other	–0.0001327	1,776

Table 3. Standard errors of estimated percentages

(68 chances out of 100)

Base of estimated percentage (in thousands)	Estimated percentage									
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	50
75	1.73	2.43	3.49	5.22	6.21	6.95	7.53	7.97	8.29	8.69
100	1.50	2.11	3.28	4.52	5.38	6.02	6.52	6.90	7.18	7.53
250	.95	1.33	2.08	2.86	3.40	3.81	4.12	4.36	4.54	4.76
500	.67	.94	1.47	2.02	2.40	2.69	2.92	3.09	3.21	3.57
750	.55	.77	1.20	1.65	1.96	2.20	2.38	2.52	2.62	2.75
1,000	.47	.67	1.04	1.43	1.70	1.90	2.06	2.18	2.27	2.38
2,000	.34	.47	.73	1.01	1.20	1.35	1.46	1.54	1.61	1.68
4,000	.24	.33	.52	.71	.85	.95	1.03	1.09	1.14	1.19
6,000	.19	.27	.42	.58	.69	.78	.84	.89	.93	.97
8,000	.17	.24	.37	.51	.60	.67	.73	.77	.80	.87
10,000	.15	.21	.33	.45	.54	.60	.65	.69	.72	.75
15,000	.12	.17	.27	.37	.44	.49	.53	.56	.59	.65
20,000	.11	.15	.23	.32	.38	.43	.46	.49	.51	.53
30,000	.09	.12	.19	.26	.31	.35	.38	.40	.41	.43
40,000	.07	.11	.16	.23	.27	.30	.33	.35	.36	.38
50,000	.07	.09	.15	.20	.23	.27	.29	.31	.32	.34
60,000	.06	.09	.13	.18	.22	.25	.27	.28	.29	.31
70,000	.06	.08	.12	.17	.20	.23	.25	.26	.27	.28
80,000	.05	.07	.12	.16	.19	.21	.23	.24	.25	.27

Table A. Number and percent of full-time wage and salary workers who worked long weeks and who received premium pay by industry, May 1978 and May 1979

(Numbers in thousands)

Industry group	May 1978			May 1979		
	Worked 41 hours or more			Worked 41 hours or more		
	Number	Percent of full-time workers	Percent received premium pay	Number	Percent of full-time workers	Percent received premium pay
All industries	18,977	27.3	42.9	18,765	26.2	42.6
Goods producing	7,357	28.0	61.1	7,398	27.2	61.5
Agriculture	541	47.4	14.0	607	52.6	12.2
Mining	302	40.9	65.6	283	34.8	65.0
Construction	1,026	22.3	55.1	994	21.2	54.9
Manufacturing	5,488	27.7	66.7	5,513	26.9	68.0
Service producing	11,620	26.9	31.3	11,367	25.5	30.3
Transportation and public utilities	1,517	28.7	49.8	1,567	28.7	49.9
Trade	4,187	35.8	32.0	4,085	34.2	31.8
Finance, insurance, and real estate	906	21.8	21.3	924	20.8	20.5
Service	4,255	24.3	24.0	4,048	22.6	21.6
Professional 1/	2,937	22.5	20.4	2,791	20.7	18.2
Other 2/	1,318	29.9	32.0	1,257	28.5	29.0
Public administration	753	16.7	43.4	741	15.6	40.9
Federal	317	15.2	58.7	319	14.4	52.4
Postal	130	21.3	80.8	116	18.2	78.4
Other Federal	187	12.6	43.3	203	12.9	37.4
State	100	12.1	31.0	80	9.4	42.5
Local	336	21.1	32.7	342	20.0	30.1

[1] Includes health, education and welfare services.

[2] Includes forestry and fisheries, business and repair services, entertainment, personal services, and private household workers.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table B. Percent of full-time wage and salary workers who worked 41 hours a week or more and percent who received premium pay by occupation group, May 1973-79

Occupation group	Worked 41 hours or more						
	1973	1974	1975	1976	1977	1978	1979
Total	29.1	27.6	25.0	25.8	27.4	27.3	26.2
White collar	28.6	27.9	26.4	25.9	27.5	28.0	26.2
Professional	29.7	29.8	27.0	26.0	28.1	29.2	26.4
Managers and administrators	47.7	46.1	45.2	44.8	45.5	44.9	44.0
Salesworkers	40.0	35.3	36.9	35.1	37.1	36.6	34.2
Clerical workers	13.2	13.2	11.5	12.0	13.2	14.2	12.6
Blue collar	30.2	27.4	23.0	26.3	28.1	27.8	27.2
Skilled trades workers	32.4	30.4	24.7	27.2	29.5	30.6	30.1
Operatives, except transport	26.2	22.6	18.2	22.7	24.2	23.7	22.2
Transport equipment operatives	42.4	41.5	36.0	41.3	40.0	40.5	40.4
Laborers, except farm	25.1	21.4	20.0	20.8	24.0	20.0	20.7
Service workers	23.8	21.9	20.9	20.0	20.3	19.1	18.3
Farm workers	59.3	61.8	59.8	61.9	58.1	50.8	56.6
	Received premium pay						
Total	42.5	41.6	36.2	39.7	42.4	42.9	42.6
White collar	21.9	23.2	20.8	21.2	23.0	24.4	23.8
Professional	16.6	18.9	16.7	16.4	18.8	20.2	21.0
Managers and administrators	12.8	12.7	11.6	11.3	12.1	12.9	11.9
Salesworkers	13.2	14.7	14.5	15.3	14.7	15.8	14.7
Clerical workers	59.0	60.1	57.5	56.9	60.3	60.8	62.5
Blue collar	70.8	69.0	64.2	68.0	70.7	70.1	70.9
Skilled trades workers	65.5	65.4	61.7	62.5	65.7	65.2	67.0
Operatives, except transport	85.9	82.9	77.9	84.3	83.5	85.1	84.7
Transport equipment operatives	54.5	54.4	48.9	53.0	57.4	52.5	56.2
Laborers, except farm	67.4	64.1	63.2	64.0	72.8	73.3	71.6
Service workers	25.7	30.5	31.0	30.0	36.2	41.4	36.8
Farm workers	5.1	8.4	8.6	10.1	8.5	7.6	6.8

Table C. Number of wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by industry groups and hours worked, May 1979

Industry group	Worked 41 to 48 hours		Worked 49 to 59 hours		Worked 60 hours or more	
	Number who worked overtime	Percent receiving premium pay	Number who worked overtime	Percent receiving premium pay	Number who worked overtime	Percent receiving premium pay
All industries	8,687	54.7	6249	37.7	3,829	23.3
Goods producing	3,707	73.3	2,410	56.1	1,282	37.4
Agriculture	130	26.2	174	9.2	303	7.9
Mining	105	76.2	80	56.3	97	59.8
Construction	449	65.9	347	49.9	199	39.2
Manufacturing	3,023	76.3	1,808	61.9	683	46.9
Service producing	4,980	40.8	3,840	26.1	2,547	16.3
Transportation and public utilities	633	63.8	553	46.3	382	32.2
Trade	1,833	40.3	1,354	29.8	898	17.5
Finance, insurance and real estate	414	32.9	342	13.2	167	4.8
Service	1,714	32.6	1,351	15.8	985	10.4
Public administration	387	49.9	23	36.0	116	21.6
Federal	170	64.1	109	41.3	39	1/
State	32	1/	34	1/	15	1/
Local	183	37.7	95	24.2	63	1/

[1] Percent not shown where base is less than 75,000.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table D. Number of wage and salary workers who worked 41 hours a week or more and percent who received premium pay, by occupation group and hours worked, May 1979.

Occupation group	Worked 41 to 48 hours		Worked 49 to 59 hours		Worked 60 hours or more	
	Number who worked overtime	Percent receiving premium pay	Number who worked overtime	Percent receiving premium pay	Number who worked overtime	Percent receiving premium pay
All occupations	8,687	54.7	6,249	37.7	3,829	23.3
White collar	4,026	36.3	3,446	18.0	2,220	10.1
Professional and technical workers	1,334	30.8	1,146	17.9	719	7.6
Managers and administrators	1,164	19.2	1,386	9.3	1,093	7.5
Sales workers	443	25.7	495	9.7	274	6.2
Clerical workers	1,084	65.8	418	56.9	134	53.0
Blue collar	3,924	76.8	2,300	69.3	1,102	53.1
Skilled trades workers	1,720	71.0	1,073	66.1	494	55.3
Operatives, except transport	1,303	86.3	632	85.8	204	71.6
Transport equipment operatives	481	72.6	391	52.4	324	36.1
Laborers, except farm	420	75.5	204	67.6	80	61.3
Service workers	649	40.5	375	37.3	255	26.7
Farm workers	89	13.5	129	3.1	251	6.4

NOTE: Because of rounding, sums of individual items may not equal totals.

Table E. Number of wage and salary workers who worked 41 hours a week or more and number and percent who received premium pay, by hours worked, May 1973-79

(Number in thousands)

Hours worked	1973			1974			1975		
	Total	Received premium pay	Percent receiving premium pay	Total	Received premium pay	Percent receiving premium pay	Total	Received premium pay	Percent receiving premium pay
Total who worked 41 hours or more	18,105	7,697	42.5	17,564	7,302	41.6	15,450	5,597	36.2
Usually worked 41 hours or more	12,526	4,019	32.1	12,234	3,982	32.5	10,824	2,916	26.9
Did not usually work 41 hours or more	5,578	3,678	65.9	5,330	3,320	62.3	4,626	2,681	58.0
Worked 41 to 48 hours	8,666	4,629	53.4	8,238	4,349	52.8	7,150	3,390	47.4
Usually worked 41 hours or more	4,866	1,990	40.9	4,688	1,986	42.4	4,029	1,425	35.4
Did not usually work 41 hours or more	3,800	2,639	69.4	3,549	2,363	66.6	3,120	1,964	63.0
Worked 49 to 59 hours	5,917	2,311	39.1	5,840	2,173	37.2	4,977	1,600	32.1
Usually worked 41 hours or more	4,592	1,501	32.7	4,581	1,471	32.1	3,958	1,069	27.0
Did not usually work 41 hours or more	1,324	809	61.1	1,259	702	55.8	1,020	532	52.2
Worked 60 hours or more	3,522	757	21.5	3,486	780	22.4	3,323	607	18.3
Usually worked 41 hours or more	3,067	527	17.2	2,965	525	17.7	2,838	422	14.9
Did not usually work 41 hours or more	454	229	50.4	521	255	48.9	485	185	38.1

Hours worked	1976			1977			1978		
	Total	Received premium pay	Percent receiving premium pay	Total	Received premium pay	Percent receiving premium pay	Total	Received premium pay	Percent receiving premium pay
Total who worked 41 hours or more	16,679	6,621	39.7	18,174	7,697	42.4	18,977	8,138	42.9
Usually worked 41 hours or more	11,228	3,248	28.9	12,124	3,875	32.4	12,635	4,069	32.2
Did not usually work 41 hours or more	5,452	3,373	61.9	6,050	3,822	63.2	6,341	4,068	64.2
Worked 41 to 48 hours	7,953	4,010	50.4	8,519	4,591	53.9	8,935	4,895	54.8
Usually worked 41 hours or more	4,184	1,556	37.2	4,413	1,852	42.0	4,624	1,978	42.8
Did not usually work 41 hours or more	3,770	2,455	65.1	4,106	2,739	66.7	4,312	2,917	67.6
Worked 49 to 59 hours	5,375	1,872	34.8	5,995	2,230	37.2	6,285	2,323	37.0
Usually worked 41 hours or more	4,193	1,182	28.2	4,633	1,439	31.1	4,851	1,470	30.3
Did not usually work 41 hours or more	1,182	690	58.4	1,363	792	58.1	1,434	853	59.5
Worked 60 hours or more	3,350	738	22.0	3,660	876	23.9	3,757	920	24.5
Usually worked 41 hours or more	2,850	510	17.9	3,079	585	19.0	3,161	621	19.6
Did not usually work 41 hours or more	500	228	45.6	581	291	50.1	596	299	50.2

Hours worked	1979		
	Total	Received premium pay	Percent receiving premium pay
Total who worked 41 hours or more	18,765	7,999	42.6
Usually worked 41 hours or more	12,895	4,152	32.2
Did not usually work 41 hours or more	5,871	3,847	65.5
Worked 41 to 48 hours	8,687	4,748	54.7
Usually worked 41 hours or more	4,630	1,979	42.7
Did not usually work 41 hours or more	4,055	2,768	68.3
Worked 49 to 59 hours	6,249	2,357	37.7
Usually worked 41 hours or more	4,859	1,485	30.6
Did not usually work 41 hours or more	1,390	872	62.7
Worked 60 hours or more	3,829	894	23.3
Usually worked 41 hours or more	3,404	687	20.2
Did not usually work 41 hours or more	424	206	48.6

NOTE: Because of rounding, sums of individual items may not equal totals.

Bureau of Labor Statistics
Regional Offices

Region I
1603 JFK Federal Building
Government Center
Boston, Mass. 02203
Phone: (617) 223-6761

Region II
Suite 3400
1515 Broadway
New York, N.Y. 10036
Phone: (212) 944-3121

Region III
3535 Market Street
P.O. Box 13309
Philadelphia, Pa. 19101
Phone: (215) 596-1154

Region IV
1371 Peachtree Street, N.E.
Atlanta, Ga. 30367
Phone: (404) 881-4418

Region V
9th Floor
Federal Office Building
230 S. Dearborn Street
Chicago, Ill. 60604
Phone: (312) 353-1880

Region VI
Second Floor
555 Griffin Square Building
Dallas, Tex. 75202
Phone: (214) 767-6971

Regions VII and VIII
911 Walnut Street
Kansas City, Mo. 64106
Phone: (816) 374-2481

Regions IX and X
450 Golden Gate Avenue
Box 36017
San Francisco, Calif. 94102
Phone: (415) 556-4678